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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,769	12/10/2003	David Muhs	1059.1102105	6977

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EXAMINER

SOLAK, TIMOTHY P

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6

<b>Office Action Summary</b>	<b>Application No.</b> 10/732,769	<b>Applicant(s)</b> MUHS, DAVID	
	<b>Examiner</b> Timothy P. Solak	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-53,55-57 is/are rejected.
- 7) ☒ Claim(s) 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/26/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "inner tank 503" (page 22, line 12).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claims 39-43 and 54-57 are objected to because of the following informalities:

- \* Recitation of "electronic sensor" in Claims 39-43, line 1, lacks antecedent basis. The sensor of Claim 38, has only to give off an electric signal.
- \* Recitation of "a sensor for sensing a level of pump fluid in the reservoir;" in Claim 54, line 12, is a redundant limitation (see Claim 54, lines 4-5).

\* Recitation of "and/or" in Claim 54, line 14, is not clear in context. It is unclear as to whether or not, the limitations following the term "and/or" are within the scope of the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39-48, 50-53 and 55-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 39-48, 50-53 and 55-57 are dependent from canceled claims. For purposes of examination, it will be assumed that Claims 39-48 depend from Claim 38; Claims 50-53 depend from Claim 49 and Claims 55-57 depend from 54.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 38-39 and 44-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Millward (GB 2 303 178). Millward teaches a separator tank for a main pump 1 comprising: a

main inlet 3 and a main outlet 10, a reservoir 16 for accommodating a pump fluid, an air port 26/28 positioned above an expected level (H) of the pump fluid and an electro-mechanical float sensor 32 for sensing a level of the pump fluid in the reservoir and providing an electrical signal that provides an indication of a range of levels in the reservoir (page 5, lines 13-18). Said sensor positioned on a sidewall of the reservoir (see Figure 1). Millward further discloses the reservoir has an extension (not labeled but clearly seen as the section above the black line at the top of the reservoir, see Figure 1, line above 16) having a reduced cross-sectional area relative to the main reservoir (area below black line at 16). Millward further teaches the air port 26 is located at the top of the extension and connected to a vacuum pump 20.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millward (mentioned previously), in view of Allen (4,973,993). Although Millward teaches most of the limitations of the claims, including a reservoir having a sensor, he does not explicitly disclose a temperature, conductive, pressure or optical sensor. Allen disclosing a level sensing means for a reservoir, specifically teaches a level in a reservoir that can be detected using a temperature optical, pressure or capacity probe (column 1, lines 44-50). It was old and well known in the art of pump fabrication, that the type of probes used depends on the choice of manufacturer and the

convenience and availability of the parts necessary to construct the pump. Therefore, it would have been obvious to one of ordinary skill in the art of pump fabrication at the time the invention was made to have used a temperature, conductive, pressure or optical sensor as taught by Allen, in the pump disclosed by Millward, to have advantageously facilitated manufacturing of the pump.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Millward (mentioned previously), in view of Sloan (4,116,582). Although Millward teaches most of the limitations of the claim, including a reservoir having an air port, he does not disclose a deflector. Sloan, disclosing a reservoir 40 having an air port 58, specifically teaches a deflector 57 adjacent to and spaced apart from the air port. Sloan teaches the deflector advantageously prevented churning of the fluid (column 4, lines 13-15). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the deflector taught by Sloan, in the pump disclosed by Millward, to have advantageously prevented churning of the fluid.

***Allowable Subject Matter***

Claims 54-57 would be allowable if rewritten or amended to overcome the objections and rejections, set forth in this Office action.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Durdin (2,033,980) teaches a reservoir having a vent to atmosphere.
- Lix et al. (5,203,677) teach a reservoir having a float.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P. Solak whose telephone number is 571 272-4833. The examiner can normally be reached on Monday through Friday from 10am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Timothy P. Solak  
Examiner  
Art Unit 3746  
April 18, 2005